

REMARKS

The Examiner has objected to the specification as failing to provide proper antecedent basis for the claimed subject matter. More specifically, the Examiner has argued that 'nowhere in the specification is a "tangible computer readable medium" described.' Applicant respectfully disagrees and points out that Page 8, lines 1-2 of the specification disclose a "Random Access Memory (RAM)" and a "Read Only Memory (ROM)." Both RAM and ROM are tangible computer readable mediums, and as a result the specification provides adequate antecedent basis for the claimed subject matter. Of course, the foregoing citations are set forth for illustrative purposes only, and should not be construed as limiting in any manner.

The Examiner has rejected Claims 1, 12, 23, 28, and 29 under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. More specifically, the Examiner has argued that "[n]owhere in the specification is a "tangible computer readable medium" described." Again, applicant respectfully disagrees and points out that Page 8, lines 1-2 of the specification disclose a "Random Access Memory (RAM)" and a "Read Only Memory (ROM)." Both RAM and ROM are tangible computer readable mediums, and as a result the above claims all comply with the written description requirement. Of course, the foregoing citations are set forth for illustrative purposes only, and should not be construed as limiting in any manner.

The Examiner has rejected Claims 1-5, 7, 12-16, 18, 23, 29, and 34-37 under 35 U.S.C. 103(a) as being unpatentable over ConSeal PC FIREWALL Technical Summary (hereinafter ConSeal), in view of Hari et al. (Detecting and resolving packet filter conflicts), in view of Coss et al. (U.S. Patent No. 6,098,172), further in view of Chan et al. (U.S. Patent No. 6,910,028), and further in view of Jacobson (U.S. Patent No. 6,735,701). In addition, the Examiner has rejected Claim 28 under 35 U.S.C. 103(a) as being unpatentable over ConSeal, in view of Hari, in view of Coss, in view of Chan, and in further view of Horvitz et al. (U.S. Patent Application No. 2003/0046421). Applicant respectfully disagrees with such rejections, especially in view of the amendments made

hereinabove to the independent claims. Specifically, applicant has amended some of the independent claims to at least substantially include the subject matter of former dependent Claims 2 and 3 et al.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed.Cir.1991).

With respect to the first element of the *prima facie* case of obviousness and, in particular, the obviousness of combining the aforementioned references, the Examiner has argued that "it would have been obvious... to use Hari et al's priorities... [and] conflict resolution... in the firewall system of ConSeal," and that the "[m]otivation to do so would have been to avoid matching multiple filters with confliction actions (see Hari et al page 1204 section II." To the contrary, applicant respectfully asserts that it would not have been obvious to combine the teachings of the Hari and ConSeal references, especially in view of the vast evidence to the contrary.

The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990). Although a prior art device "may be capable of being modified to run the way the apparatus is claimed, there must be a suggestion or motivation in the reference to do so." 916 F.2d at 682, 16 USPQ2d at 1432.).

Specifically, applicant respectfully disagrees with the Examiner's argument that "it would have been obvious...to use Hari et al's priorities...[and] conflict resolution in the firewall system of ConSeal" in order to "avoid matching multiple filters with confliction actions [as taught in Hari]." First, the possible solutions relied on by the Examiner relate to a situation where there is "a conflict since the packets of the flow match both F_1 and F_2 [where F_1 and F_2 are different filters]" (page 1204, right column). Thus, Hari teaches possible solutions once it is determined that a packet flow matches multiple filters, and does not disclose "avoid[ing] matching multiple filters with confliction actions" (emphasis added), as the Examiner notes.

In addition, applicant respectfully points out that the Hari reference relied on by the Examiner expressly discloses that the "implicit *conflict resolution schemes*, [which include the filter prioritization noted by the Examiner,] while simple to implement, [actually] suffer from some serious drawbacks," such as "arbitrariness on the conflict resolution" and "inflexibility in filter matching"(Page 1204, Section II – emphasis added). Additionally, the Hari reference states that "such implicit conflict resolution schemes do not work in the general case" (Page 1204, Section II – emphasis added). As a result, the Hari reference discloses a solution involving using "resolve filters for each pair of conflicting filters" (see page 1205, right column), and not filter prioritization, as noted by the Examiner. Thus, applicant respectfully asserts that it would not have been obvious to combine a prioritization technique that "do[es] not work in the general case," as taught in Hari, with that taught by ConSeal, and therefore no suggestion or motivation exists to combine such references.

In the Office Action mailed 03/26/2007, the Examiner has argued that "Hari teaches methods of resolving conflicts (with its own benefits) using methods a), b), and c) and further states that these methods are simple to implement" and has further stated that "[t]herefore, Hari has some teaching, suggestion, or motivation to use the method described."

Applicant respectfully disagrees and again notes that Hari discloses that the “implicit conflict resolution schemes do not work in the general case” (Page 1204, Section II – emphasis added) and that as a result, the Hari reference discloses a solution involving using “resolve filters for each pair of conflicting filters” (see page 1205, right column), and not filter prioritization, as relied on by the Examiner. Therefore, Hari’s disclosure that implicit conflict resolution schemes do not work in the general case, in fact *teaches away* from the use of the aforementioned prioritization technique with that taught by ConSeal. It is improper to combine references where the references teach away from their combination. *In re Grasselli*, 713 F.2d 731, 743, 218 USPQ 769, 779 (Fed. Cir. 1983).

More importantly, applicant respectfully asserts that the third element of the *prima facie* case of obviousness has also not been met by the prior art reference relied on by the Examiner. For example, with respect to the independent claims, the Examiner has relied on page 1204, section II from the Hari reference, excerpted in part below, to make a prior art showing of applicant’s claimed technique “wherein a first policy with a higher priority has a first condition associated therewith that is different from a second condition associated with a second policy with a lower priority such that the first policy and second policy are activated under different priority-related conditions” and “identifying currently executed security actions, determining whether a conflict exists between the currently executed security actions, and resolving any conflicts between the currently executed security actions” (see this or similar, but not necessarily identical language in the independent claims).

a) The first matching filter in the filter database takes precedence. For example, if F_1 is stored before F_2 in the database, then the flow goes through at 100 Mbps. On the other hand, if F_2 is stored before F_1 , then most of the packets of the flow are dropped, since the flow is restricted to a BW of only 1 Mbps. This approach is commonly used to resolve conflicts in firewalls, where incoming packets are matched against filters specified in access control lists and the action is determined by the first matching filter.

b) Assign priorities to difference filters, and use the matching filter with the highest priority. This scheme turns out to be identical to scheme a) if we sort the filters in the order of priority.

c) Assign priorities to fields so that in case of multiple matches the filter with the most specific matching field with the highest priority is selected. For example, if the source address is given higher priority on matches than the destination address, then for packets going from network X to network Y the filter F₁ is a better match than F₂.” (Hari, page 1204, section II – emphasis added)

Applicant respectfully asserts that the excerpt from Hari relied upon by the Examiner teaches a method of conflict resolution where one filter is selected over other potential filters. Specifically, for conflict resolution, the Hari excerpt referenced above teaches three conflict resolution techniques. The first conflict resolution technique disclosed teaches that “[t]he first matching filter in the filter database takes precedence” (emphasis added). The second conflict resolution technique disclosed teaches to “[a]ssign priorities to difference filters, and use the matching filter with the highest priority” (emphasis added). The third conflict resolution technique disclosed teaches to “[a]ssign priorities to fields so that in case of multiple matches the filter with the most specific matching field with the highest priority is selected” (emphasis added).

Thus, the excerpt from Hari referenced above actually *teaches away* from applicant’s claimed technique “wherein a first policy with a higher priority has a first condition associated therewith that is different from a second condition associated with a second policy with a lower priority such that the first policy and second policy are activated under different priority-related conditions” (emphasis added), since Hari teaches that a selection of the filters is based on the same priority-related condition [namely, condition a), b), or c) in the above excerpt]. Note that Hari does not teach that a first filter is selected based on technique a) while a second filter is selected based on technique b), etc.

In the Office Action mailed 10/12/2006, the Examiner has argued that “when a conflict arises the filter with the highest priority is selected and when only a single filter matches, i.e. no conflict, that filter is activated because it has the highest (an[d] only priority) which is a second priority related activation of a policy different than the first.” Applicant respectfully disagrees. Specifically, applicant claims that “the first policy and

second policy are activated under different priority-related conditions” (emphasis added), which is not met by a teaching that one policy is activated when there is no policy conflict and another policy is activated when there is a policy conflict, as the Examiner notes. Simply nowhere in the excerpt in Hari relied on by the Examiner is there any suggestion that “a first policy with a higher priority has a first condition associated therewith that is different from a second condition associated with a second policy with a lower priority such that the first policy and second policy are activated under different priority-related conditions” (emphasis added), as applicant specifically claims.

Also in the Office Action mailed 10/12/2006, applicant notes that the Examiner has simply reiterated the argument stated in the Office Action mailed 05/05/2006, namely that “the priority based system of Hari teaches that each filter (i.e. policy) has a different priority and when a packet matches more than one filter, which ever filter has a higher priority is used.” Again, applicant respectfully asserts that Hari teaches, during conflict resolution, either selecting the first matching filter, the matching filter with the highest priority, or the filter with the most specific matching field with the highest priority. Again, applicant respectfully disagrees with the Examiner’s rejection, since Hari teaches that a selection of the filters is based on the same priority-related condition [namely, condition a), b), or c) in the above excerpt]. Again, only applicant teaches and claims a technique “wherein ... the first policy and second policy are activated under different priority-related conditions” (emphasis added), as claimed.

In the Office Action mailed 03/26/2007, the Examiner has argued that “Hari discloses the use of priorities to resolve conflicts” and has “extend[ed] the example before the descriptions of a), b), and c) on page 1204” of Hari by creating a theoretical scenario and has alleged that “whenever traffic comes to the filter from the network (128.112.*) destined for the network (128.122.*) there is a conflict between all three filters, [and] since F_1 has the highest priority it will be chosen.” The Examiner has further stated that “[t]herefore, F_1 is chosen under a first priority-related condition.” Additionally, the Examiner has stated that in “a conflict between F_2 and F_3 , ... since F_2 has

a higher priority it will be chosen” and that “[t]herefore F_2 is chosen under [a] second priority-related condition.”

Applicant respectfully disagrees and points out that the above theoretical example fabricated and relied on by the Examiner merely implements one of the three “possible solutions” provided on page 1204 of Hari. More specifically, by stating that F_1 is chosen in a conflict “since F_1 has the highest priority,” the Examiner has merely demonstrated the implementation of solution b) in Hari, which “[a]ssign[s] priorities to different filters, and use[s] the matching filter with the highest priority.” However, applicant again asserts that Hari merely describes three “possible solutions” for “a conflict [when] the packets of the flow match both F_1 and F_2 ,” which does not even *suggest*, and in fact *teaches away* from, a technique “wherein a first policy with a higher priority has a first condition associated therewith that is different from a second condition associated with a second policy with a lower priority such that the first policy and second policy are activated under different priority-related conditions” (emphasis added), as claimed by applicant. Clearly, the disclosure of using the matching filter with the highest priority, as in Hari, simply fails to even suggest a technique “wherein ... the first policy and second policy are activated under different priority-related conditions” (emphasis added), as claimed.

In addition, with respect to the independent claims, the Examiner has relied on Col. 7, line 60 – Col. 8, line 33 from Chan to make a prior art showing of applicant’s claimed technique “wherein the conditions include a source of the policies” (see this or similar, but not necessarily identical language in the independent claims).

Applicant respectfully asserts that the excerpt relied upon by the Examiner merely teaches “[a] merge policy [which] represents priorities and/or mutual-exclusions” (Col. 7, lines 61-62). In addition, the excerpt teaches that “the merge policy may specify that the relative priority of rules is based on relative authority level of the originating source application of those rules” (Col. 8, lines 2-4 - emphasis added). However, the excerpt fails to disclose a technique “wherein the conditions include a source of the policies”

(emphasis added), as claimed by applicant. Merely disclosing that the policy itself specifies a relative priority of rules, as in Chan, fails to suggest “conditions [that] include a source of the policies” (emphasis added), in the context claimed by applicant.

In the Office Action mailed 03/26/2007, the Examiner has argued that “Chen specifically teaches that the priority is based on the authority level of the originating source application” and that “[t]herefore, the policies have a priority and this priority is based on the source application.” Further, the Examiner has asserted that “the conditions are the priority.”

Applicant respectfully disagrees and again points out that Chen merely teaches that the policy itself may specify a relative priority of rules based on the authority level of the source of the rules. If the conditions are the priority, as asserted by the Examiner, then, in Chen, the policy specifies the conditions (relative priority) of rules are based on the source application of those rules, which does not even suggest “conditions [that] include a source of the policies” (emphasis added), as claimed by applicant. Clearly, specifying the conditions of the rules based on the source application of the rules, as in Chen, simply fails to even suggest that “the conditions include a source of the policies” (emphasis added), as claimed by applicant.

Further, with respect to the independent claims, the Examiner has relied on Col. 18, lines 15-30 from Jacobson to make a prior art showing of applicant’s claimed technique “wherein the conditions include a severity of security actions associated with the policies” (see this or similar, but not necessarily identical language in the independent claims).

Applicant respectfully points out that the excerpt from Jacobson relied on by the Examiner merely teaches that “[e]ach compliance action in the group is assigned a value” and that “[t]he numeric value assigned is based on the severity of the network policy compliance violation, i.e. the difference between the network policy compliance value and the user policy compliance value” (Col. 18, lines 15-21 - emphasis added). However,

merely assigning a value to a compliance action based on the severity of the compliance violation, as in Jacobson, fails to teach a technique “wherein the conditions include a severity of security actions associated with the policies” (emphasis added), as claimed by applicant. Clearly, a value that is the difference between the network policy compliance value and the group user policy compliance value, as in Jacobson, simply fails to even suggest “a severity of security actions associated with the policies” (emphasis added), in the manner as claimed by applicant.

With respect to independent Claim 28, the Examiner has relied on paragraph [0117] in Horvitz to make a prior art showing of applicant’s claimed technique “wherein the conditions represent an urgency associated with an issue causing the policy to be activated.”

Applicant respectfully asserts that the excerpt in Horvitz relied on by the Examiner merely discloses that “[c]lassification as used herein also is inclusive of statistical regression that is utilized to develop models of urgency or other measures of priority influencing an alerting and/or routing policy.” Applicant respectfully points out that the alerting and/or routing policy disclosed in Horvitz only relates to “priorities for messages represented electronically” where such “priority of an electronic message can be classified” (paragraph [0116]). Thus, the urgency disclosed in Horvitz is associated with the message, and therefore does not even suggest that “the conditions represent an urgency associated with an issue causing the policy to be activated” (emphasis added), as claimed.

In the Office Action mailed 03/26/2007, the Examiner has argued that “Horvitz teaches using urgency for a measure of priority for influencing an alerting and/or routing policy” and that “therefore when combined as given above the alerts to activate a policy based on an issue given by ConSeal now have an urgency related to them.”

Applicant respectfully disagrees and again asserts that Horvitz merely teaches “models of urgency or other measures of priority influencing an alerting and/or routing

policy” (paragraph [0117]) where the priority is “a priority for electronic files such as an e-mail” (paragraph [0116]). Therefore, the urgency taught in Horvitz is associated with the electronic message, and therefore does not even suggest that “the conditions represent an urgency associated with an issue causing the policy to be activated” (emphasis added), as claimed.

Applicant respectfully asserts that at least the first and third element of the *prima facie* case of obviousness have not been met, since it would be *unobvious* to combine the ConSeal and Hari references, as noted above, and the prior art references, as relied upon by the Examiner, fail to teach or suggest all of the claim limitations, as also noted above. Nevertheless, despite such paramount deficiencies and in the spirit of expediting the prosecution of the present application, applicant has incorporated the subject matter of former dependent Claims 2 and 3 et al. into some of the independent claims.

With respect to the subject matter of former Claims 2 and 3 et al. (now at least substantially incorporated into some of the independent claims), the Examiner has relied on Page 2 of the ConSeal reference, as excerpted below in part, to make a prior art showing of applicant’s claimed “determining whether a user confirms the activation of the policies” (Claim 2 et al.) and “activating the policies if the user confirms” (Claim 3 et al.).

“ConSeal PC FIREWALL’s learning modes allow rules and rulesets to be generated efficiently and straightforwardly. The Manual Learning Mode allows users to add, edit and delete their rules and tweak them according to address, service type and so on. The Checked Learning Mode prompts the user for rule generation when it encounters a packet for which it has no rule. The Unchecked Learning Mode allows users to generate rules in the background by performing their normal networking activities over a trial period.” (ConSeal, Page 2 – emphasis added)

Applicant respectfully asserts that the excerpt from ConSeal relied upon by the Examiner merely teaches a technique where the “Checked Learning Mode prompts the user for rule generation when it encounters a packet for which it has no rule” (emphasis added). However, the excerpt fails to disclose “determining whether a user confirms the

activation of the policies” (emphasis added) or “activating the policies if the user confirms” (emphasis added), as claimed by applicant.

In the Office Action mailed 10/12/2006, the Examiner has argued that “when a rule in ConSeal has not been used before and the system is in Checked Learning Mode, the user is prompted to make a rule for the packet (i.e. allow or disallow) thereby creating two inactive policies (one to allow the packet and one to disallow the packet)” and “[t]herefore when the user selects an action the user is activating one of the previous inactive rules.”

Applicant respectfully disagrees. Simply nowhere in the excerpt relied on by the Examiner is there any disclosure that “when the user selects an action the user is activating one of the previous inactive rules,” as the Examiner notes. In fact, applicant points out that ConSeal actually teaches that “[t]he system manages rulesets activation...behind the scenes” (see page 1), which clearly *teaches away* from “determining whether a user confirms the activation of the policies” (emphasis added) or “activating the policies if the user confirms” (emphasis added), as claimed by applicant.

In addition, applicant respectfully asserts that ConSeal merely discloses that “Checked Learning Mode prompts the user for rule generation when it encounters a packet for which it has no rule” (emphasis added). Clearly, prompting a user for rule generation when no rule exists, as in ConSeal, fails to even suggest “determining whether a user confirms the activation of the policies” (emphasis added) and “activating the policies if the user confirms” (emphasis added), as claimed by applicant. Applicant respectfully asserts that ConSeal’s prompt for “rule generation” for a packet which has no rule simply fails to teach “determining whether a user confirms the activation of the policies” (emphasis added) or “activating the policies if the user confirms” (emphasis added), as claimed by applicant. Clearly, rule generation, as in ConSeal, fails to meet “activating the policies,” in the manner as claimed by applicant.

In the Office Action mailed 03/26/2007, the Examiner has argued that “when ConSeal is in the Checked Learning Mode and a packet arrives with no policy ConSeal creates two inactive policies (allow or block) and presents the user with these two options.” The Examiner has further argued that “when the user selects one of these options the user confirms the activation of the policy.”

Applicant respectfully disagrees and notes that simply nowhere in Page 2 of the ConSeal reference, as relied on by the Examiner, is there any disclosure of “creat[ing] two inactive policies (allow or block) and present[ing] the user with these two options” in “Checked Learning Mode.” The excerpt relied on by the Examiner merely discloses that “[t]he Checked Learning Mode prompts the user for rule generation when it encounters a packet for which it has no rule” (Page 2 — emphasis added). Again, merely prompting a user for rule generation, as in ConSeal, does not disclose “determining whether a user confirms the activation of the policies” (emphasis added) or “activating the policies if the user confirms” (emphasis added), as claimed by applicant.

Additionally, in the Office Action mailed 03/26/2007, the Examiner has argued that ConSeal “manag[ing] the rule sets behind the scenes... is in a different mode than that of the Checked Learning Mode and therefore has no relevance.” Applicant respectfully disagrees and asserts that ConSeal discloses “[m]anual, automatic, checked and unchecked learning modes,” in addition to “[e]nvironment sensitive rulesets” where “[t]he system manages rulesets activation and conflicts behind the scenes” (Page 1, ConSeal PC FIREWALL Technical Information). Therefore, ConSeal’s teaching of different learning modes, in addition to the system managing rulesets activation behind the scenes simply *teaches away* from “determining whether a user confirms the activation of the policies” (emphasis added) or “activating the policies if the user confirms” (emphasis added), as claimed by applicant. Clearly, the system managing rulesets activation, as in ConSeal, fails to even suggest that “a user confirms the activation” (emphasis added), or “activating the policies if the user confirms” (emphasis added), in the manner as claimed by applicant.

Thus, a notice of allowance or a proper prior art showing of all of applicant's claim limitations, in combination with the remaining claim elements, is respectfully requested. While some instances of previous versions of the claim language have been cited above, note should be taken of the clarifications made hereinabove to the claims.

Applicant further notes that the prior art is also deficient with respect to the dependent claims. For example, with respect to Claim 34, the Examiner has relied on the bottom of Page 1 to the top of Page 2 of the ConSeal reference to make a prior art showing of applicant's claimed technique "wherein the associated conditions of the policies dictate the manner in which the active policies are to be deactivated." Applicant notes that the Examiner has cited the "bottom of page 1 to the top of page 2" without citing a specific reference, which applicant interprets as the bottom of Page 1 to the top of Page 2 of the ConSeal reference.

Applicant respectfully notes that the excerpt relied on by the Examiner merely teaches "activat[ing] rulesets only for specific applications" (Page 1), as well as "[p]rotect[ing] access to rulesets... develop[ing] rulesets," in addition to allowing "users to add, edit and delete their rules and tweak them according to address, service type, and so on" (Page 2). However, merely activating, protecting, and developing rulesets, in addition to allowing users to add, edit, delete, and tweak rules, as in ConSeal, does not teach a technique "wherein the associated conditions of the policies dictate the manner in which the active policies are to be deactivated" (emphasis added), as claimed by applicant.

Additionally, with respect to Claim 37, the Examiner has relied on the bottom of Page 1 to the top of Page 2 of the ConSeal reference to make a prior art showing of applicant's claimed technique "wherein an indication of the determination whether the de-activated policy is to be reused or discarded is stored with the associated condition." Applicant notes that the Examiner has cited the "bottom of page 1 to the top of page 2" without citing a specific reference, which applicant interprets as the bottom of Page 1 to the top of Page 2 of the ConSeal reference.

Applicant again respectfully notes that the excerpt relied on by the Examiner merely discloses “activat[ing] rulesets only for specific applications” (Page 1), as well as “[p]rotect[ing] access to rulesets... develop[ing] rulesets,” in addition to allowing “users to add, edit and delete their rules and tweak them according to address, service type, and so on” (Page 2). However, merely activating, protecting, and developing rulesets, in addition to allowing users to add, edit, delete, and tweak rules, as in ConSeal, does not teach a technique “wherein an indication of the determination whether the de-activated policy is to be reused or discarded is stored with the associated condition” (emphasis added), as claimed by applicant.

Again, applicant respectfully asserts that at least the third element of the *prima facie* case of obviousness has not been met, since the prior art references, as relied upon by the Examiner, fail to teach or suggest all of the claim limitations, as noted above. Thus, a notice of allowance or specific prior art showing of each of the foregoing claim elements, in combination with the remaining claimed features, is respectfully requested.

Still yet, applicant brings to the Examiner’s attention the subject matter of new Claims 38-39 below, which are added for full consideration:

“wherein the conditions are based on the detection of a predetermined amount of files of a certain type” (see Claim 38); and

“wherein the conditions are based on whether a virus signature update is current” (see Claim 39).

Thus, all of the independent claims are deemed allowable. Moreover, the remaining dependent claims are further deemed allowable, in view of their dependence on such independent claims.

In the event a telephone conversation would expedite the prosecution of this application, the Examiner may reach the undersigned at (408) 505-5100. The Commissioner is authorized to charge any additional fees or credit any overpayment to Deposit Account No. 50-1351 (Order No.NAIIIP048/01.183.01).

Respectfully submitted,
Zilka-Kotab, PC.

/KEVINZILKA/

P.O. Box 721120
San Jose, CA 95172-1120
408-505-5100

Kevin J. Zilka
Registration No. 41,429